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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,365	01/05/2001	Adriaan Johannes Rijnberg	PHNL000014	3887

24737 7590 10/31/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
CORRIELUS, JEAN B	
ART UNIT	PAPER NUMBER
2637	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/755,365	RIJNBERG ET AL.	
	Examiner	Art Unit	
	Jean B Corrielus	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2005* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,7,13-16 and 18* is/are rejected.

7)☒ Claim(s) *5,9 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art page 1, lines 1-24 in view of Honda US Patent No. 5,495,556.

As per claims 1 and 7, Applicant admitted prior art page 1, lines 1-24 teaches a method and apparatus for transmitting a digital information signal via a transmission medium, including: input means for receiving the digital information signal, adaptive prediction filter means adapted to derive a prediction signal from the digital information signal in dependence on an array of prediction filter coefficients; first signal combination means for combining the digital information signal and said prediction signal so as to obtain a residual signal; encoding means for encoding said residual signal so as to obtain an encoded signal, coefficient generator means for generating an array of filter coefficients A[i] in response to the digital information signal, i being an integer for which it holds that 0 # i < p, where p is a variable; output means for supplying the encoded signal to an output terminal for transmission via the transmission medium. See applicants admitted prior art page lines 1-24.

However, Applicants admitted prior art page lines 1-24 does not teach or fairly suggest the further limitations of a smoothing means for smoothing the array of filter coefficient A[i] so as to obtain the array of prediction filter coefficients for supply to the adaptive prediction filter means. In the same field of endeavor, Honda teaches fig. 2, a

smoothing means 35 for smoothing the array of filter coefficient, see output of element 34, so as to obtain an array (series) of prediction filter coefficients for supply to element 37 functionally equivalent to the claimed adaptive prediction filter means. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in applicant's admitted prior art so as to control abrupt variation in the output of element 34 so that the coefficients do not fluctuate.

As per claim 13, see claim 1. In addition, the admitted prior art page 4, lines 26-28 teaches the encoded signal is transmitted on a transmission medium.

2. Claims 2-4, 6 and 14-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art page 1, lines 1-24 in view of Honda US Patent No. 5,495,556 further in view of Shimoni et al US Patent No. 4,777,620.

. As per claim 2, as applied to claims 1 and 7 above, applicant admitted prior art page 1, lines 1-24 and Honda discloses the invention substantially as claimed but does not explicitly teach that the smoothing means (includes) is a low pass filter. However, it is well known in the art to implement a smoothing means as a LPF. For instance, Shimoni et al teaches the implementation of a soothing means as a low pass filter. See col. 1, line 66-col. 2, line 2. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Applicant admitted prior art and Honda in order to ensure that high frequency content of the data is reduce thus improving the predictability of the predictor see col. See col. 1, line 66-col. 2, line 2.

As per claims 3 and 4, it is well established in the art to implement a lowpass filter as either IIR or FIR. Given that fact, it would have been obvious to one skill in the art to implement the lowpass filter as either IIR or FIR so as to satisfy system design requirements.

As per claim 6, it is well known in the art to store buffer the signal in a storage device (record carrier) prior to transmission. Given that, it would have been obvious to one skill in the art to store buffer the signal in a storage device (record carrier) prior to transmission so as to avoid data lost in the event of transmission failure.

As per claim 14 see claim 2.

As per claims 15 and 16, see claims 3 and 4.

As per claim 18, note that by implanting the teaching of Honda in applicant's admitted prior art, the smoothed coefficients generated would be prediction filter coefficients.

Allowable Subject Matter

3. Claims 5, 9 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 9/7/05 have been fully considered but they are not persuasive. It is alleged that Honda teaches only the smoothing of the phase equalization coefficients rather than the smoothing of the prediction coefficients. Note that the primary reasons Honda has been introduced in the outstanding art rejection

was to show that smoothing of coefficients is well known and well established in the art. Whether the coefficients are prediction coefficients or "phase equalization coefficients, the function of the smoothing means/step would still be the same, i.e. generating smoothed coefficient output. In other word, given the teaching of smoothing coefficients of Honda, one skill in the art would have been motivated to modify the admitted prior art to smooth the prediction coefficients, as indicated in the last office action for the reasons given by Honda. For the sake of argument, note that the output of the equalization filter is a filtered prediction signal see Honda col. 4, lines 33-34 then coefficients generated by the smoothing means have to be prediction coefficients. In addition, the argument made in reference to Shimoni et al is moot as the smoothing of the coefficients has been addressed with reference to Honda. Note that the low pass filter, FIR and IIR filters were introduced in the last office action to show that it is well known practice to implement a smoothing means as low pass filter, FIR and IIR. The smoothing of coefficients is taught by the primary reference.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean B Corrielus
Primary Examiner
Art Unit 2637
10-15-05